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# FRBSF WEEKLY LETTER

May 17, 1991

## Recession and the West

How has the Twelfth District fared during the current recession? In California, the economy has weakened along with the nation, losing jobs in both manufacturing and construction. In addition, California was hit with some unusual shocks, including the drought, the year-end freeze, and a \$12.6 billion state budget shortfall that threatens to force higher taxes and worker furloughs. The bad news is reflected in the April unemployment rate for California, which stood at 7.4 percent.

Looking only at California, however, gives a misleading picture of the overall economic health of the Twelfth District. In several of the other eight states that make up the District, the evidence seems to be that the national recession has passed them by so far. This *Letter* reviews the strong economic performance of the Twelfth District states outside of California (called, for convenience, the "western" states). It then considers the sources of this strong performance, and places it in the context of previous recessions.

### Growth in the West

Prior to the current recession, the western states registered employment growth rates that were among the strongest in the nation. Since the onset of the national slowdown in July 1990, employment growth has slowed in several western states; but in general, their economies have continued to expand. As of March, employment in the nation has dropped at a 2.0 percent annual rate since July, while western job growth has ranged from lows of 0.9 and 1.3 percent in Hawaii and Arizona, respectively, to robust rates of 3.1, 4.6, and 5.7 percent in Nevada, Utah, and Idaho.

Why are these states bucking the national trend? No single explanation applies to all of them, but examining the components of job growth relative to national trends is revealing. First, since July,

employment in the construction sector has contracted nationally at a 12.3 percent annual rate, but in several western states, it has grown significantly, especially Idaho (17.5 percent), Oregon (5.6 percent), Utah (6.9 percent), and Washington (3.6 percent). But not all western states have fared well. Construction employment contracted in Arizona (-7.6 percent). Nevada also saw a decline in construction employment at 3.7 percent annual rate, but this follows a three-year construction boom that was fueled by casino development; still, construction jobs remain a high proportion of total employment. These construction "boomlets" in part reflect relatively low vacancy rates and expanding populations in these states. While not sustainable indefinitely, they have helped support the regional economies during the national downturn.

Continued expansion in the service sector is another source of growth for western states. Service sector jobs have expanded at a 3.6 percent annual rate since July, compared with 1.8 percent growth nationally. States with particularly strong expansion in service jobs include Oregon (4.3 percent), Idaho (5.2 percent), Utah (7.4 percent), and Washington (5.4 percent). This sector traditionally is less cyclical than manufacturing or construction. Moreover, the share of jobs in the service sector in western states is growing and should improve the resilience of western economies.

As expected, manufacturing activity, traditionally the most cyclical of sectors, has been adversely affected in several western states. Slowdowns have occurred in aerospace and electronics, reflecting reduced defense spending, and in the wood products sector, reflecting the national slowdown in construction and limits in logging. The hardest hit western states are Hawaii, Oregon, and Arizona, where manufacturing jobs have fallen at 3.5, 5.8, and 2.5 percent annual

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## THE WESTERN ECONOMY

*The Western Economy* is a quarterly review of economic conditions in the Twelfth Federal Reserve District. It is published in the *Weekly Letter* on the third Friday of February, May, August and November.

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rates, respectively, since July. These declines compare with a national contraction of 5.9 percent, however, and mask some strong spots. Even though aerospace has been hurt nationwide by defense cutbacks, Boeing in Washington has large orders for commercial aircraft that are helping support that state's economy through the national decline. In some other western states, the manufacturing sector actually has expanded. Manufacturing jobs have grown at 6.4, 3.4, and 3.6 percent rates in Idaho, Nevada, and Utah, respectively. Some reports suggest that this growth is at least partly attributable to the expansion of facilities headquartered in higher cost states, such as California.

In general, continued expansion in service jobs, combined with less weakness than seen nationally in the construction and manufacturing sectors, helps account for the relative strength of many western states. Should we be surprised by the relative health of western economies? Do these states always perform better during national downturns? We now turn to some historical evidence of how western states perform during recessions.

## Evidence from past recessions

Since 1950, the National Bureau of Economic Research has identified the peaks and troughs of seven recessions. (The onset of the current recession was just identified as July 1990.) To examine western performance, an analysis of monthly employment data (seasonally adjusted) shows how the movements from peak to trough in western states compare to the national experience. The results of this analysis suggest that western states often do outperform the nation during recessions, but not always.

In the two most recent episodes—the short recession of January 1980–July 1980 and the severe downturn of July 1981–November 1982—the performance of Twelfth District states mirrored that of the nation. Nationwide, employment contracted 1.4 and 2.9 percent in the two downturns. California performed slightly better (with 0.5 and 2.8 percent contractions), while the other Twelfth District states performed somewhat worse (with 1.4 and 3.3 percent contractions).

In all recessions prior to the 1980s, however, the western states (taken as a group) outperformed the nation. The best relative performance occurred in the mid-1970s when employment

nationwide contracted by 1.8 percent between November 1973 and March 1975, but expanded 2.8 percent in the western states.

One source of this relatively good performance during business downturns is that Twelfth District states historically have been less reliant on the cyclical manufacturing sector; within the District, the western states rely less on manufacturing than California. At the start of the July 1953–May 1954 recession, for example, manufacturing jobs comprised 35.8 percent of all jobs outside of the District, compared to 27.6 percent in California and 24.0 percent in the western states. The manufacturing share of national employment has shrunk dramatically since that time, but western states continue to have a relatively small share. As of July 1990, manufacturing accounted for 17.8 percent of the jobs outside of the Twelfth District. California had a comparable share of 16.4 percent. For the western states, however, manufacturing employment accounted for only 13.7 percent of all jobs.

Even *within* manufacturing, however, job losses in California and the other western states were less severe than in the nation during six of the seven recessions studied (the exception is December 1969–November 1970). One explanation for this relative strength is that manufacturing in the West is less reliant on the highly cyclical auto and steel industries than is the Midwest, for example.

## Conclusion

The western states have exhibited resilience during national economic downturns and have outperformed the nation in five of the last seven recessions. The performance of the region in the current downturn is no exception. One factor helping to insulate the western states from a downturn is the comparatively small size of its manufacturing sector. Nonmanufacturing industries typically have been more immune to downturns, while manufacturing tends to have wide swings. Moreover, even within manufacturing, the western states fare better by being less reliant on the most cyclical industries, such as the steel and auto industries.

A word of caution, however: While the western economies are resilient during downturns they are not immune from them. In only one of the previous seven recessions did the region avoid employment losses from peak to trough, making the current continued employment growth the exception rather than the rule.

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Economist

# **DISTRICT INDICATORS** (Seasonally Adjusted)

	91Q1	90Q4	90Q3	90Q2	90Q1	89Q4	89Q3	89Q2	% CHANGE FROM:	
									90Q4	90Q1
<b>AGRICULTURE</b>										
U.S. CROP PRICES, 1985=100	113.8	113.5	117.0	118.3	118.4	114.7	113.4	115.1	0.22	-3.93
DISTRICT CROP PRICES, 1985=100	106.3	109.9	113.5	112.4	129.9	115.9	115.7	122.3	-3.30	-18.15
FARM CASH RECEIPTS, MILLION \$	2425.3	2424.1	2504.2	2457.1	2432.3	2534.2	2425.5	2511.8	0.05	-0.29
CATTLE ON FEED, 1985=100	93.5	85.4	88.0	89.9	90.1	91.0	92.5	90.3	9.44	3.75
CATTLE PRICES, CALIFORNIA, \$/CWT.	64.0	63.9	65.9	66.6	63.6	62.4	62.7	61.8	0.10	0.63
<b>FORESTRY</b>										
LUMBER PRODUCTION, MILLIONS BOARD FEET	1410.1	1358.2	1564.3	1669.3	1767.2	1795.0	1787.9	1732.8	3.82	-20.21
NORTHWEST LUMBER INVENTORY, MIL. BOARD FEET	2365.7	2321.4	2495.0	2621.6	2606.7	2529.3	2533.3	2445.3	1.91	-9.24
U.S. LUMBER PRICES, 1986=100	112.7	120.0	130.6	132.3	129.6	128.0	124.1	119.9	-6.12	-13.07
<b>ENERGY</b>										
SPOT PRICE OF OIL, \$/BARREL	22.1	32.1	26.2	17.8	21.8	20.3	19.3	20.5	-31.04	1.46
U.S. RIG COUNT	980.7	1084.1	994.1	1038.2	921.7	1002.3	878.2	828.7	-9.53	6.40
DISTRICT RIG COUNT	75.8	73.6	74.4	72.8	56.8	69.2	73.4	68.5	3.02	33.38
FUEL MINING EMPLOYMENT, 1985=100	75.5	73.8	73.9	73.9	75.5	75.2	75.8	76.8	2.36	-0.01
U.S. SEISMIC CREW COUNT	118.7	120.2	122.3	128.4	127.2	128.5	129.8	129.9	-1.25	-6.65
<b>MINING</b>										
MINERAL PRICES, 1986=100	107.6	111.9	129.7	127.6	123.7	125.4	128.3	136.4	-3.82	-12.96
METAL MINING EMPLOYMENT, 1985=100	192.6	198.0	197.4	199.2	196.6	193.9	190.8	184.5	-2.76	-2.03
<b>CONSTRUCTION</b>										
NONRESIDENTIAL AWARDS	1521.7	1411.4	1557.5	1585.5	1726.2	1469.9	1655.5	1519.8	7.82	-11.85
RESIDENTIAL PERMITS	17576	18219	22860	26468	31871	32866	30774	31851	-3.53	-44.85
WESTERN HOUSING STARTS, THOUSANDS	15.5	18.6	29.1	31.2	30.7	29.3	35.2	37.7	-16.67	-49.57
CONSTRUCTION EMPLOYMENT, THOUSANDS	1040.8	1043.0	1058.2	1068.5	1066.8	1044.5	1018.6	1005.4	-0.21	-2.44
<b>MANUFACTURING</b>										
WAGES, CALIFORNIA, \$/HOUR	11.7	11.7	11.6	11.4	11.3	11.3	11.2	11.1	0.29	3.60
EMPLOYMENT, THOUSANDS	3082.8	3097.7	3124.8	3143.6	3158.3	3160.4	3164.4	3153.3	-0.48	-2.39
DURABLES, 1985=100	98.5	99.7	101.3	102.2	103.0	103.6	104.0	103.8	-1.24	-4.37
CONSTRUCTION DURABLES, 1985=100	103.3	104.3	108.0	110.1	112.0	112.5	113.1	111.4	-0.97	-7.78
AEROSPACE, 1985=100	110.8	113.1	115.3	117.7	118.3	117.5	116.3	115.1	-2.02	-6.35
ELECTRONICS, 1985=100	92.2	92.4	92.7	93.1	93.8	93.9	94.0	94.7	-0.16	-1.74
SEMICONDUCTOR ORDERS, MILLIONS \$, NOT S.A.	1247.3	1151.4	1192.2	1309.7	1227.7	1197.9	1166.3	1300.0	8.33	1.60
WHLs/RETAIL TRADE EMPLOYMENT, THOUSANDS	4843.1	4823.7	4827.2	4805.6	4773.0	4752.6	4723.6	4679.8	0.40	1.47
RETAIL SALES, PACIFIC DISTRICT, MIL. \$	24511	25138	25195	24979	24720	23992	23883	23390	-2.49	-0.84
<b>SERVICES EMPLOYMENT, THOUSANDS</b>										
HEALTH CARE, 1985=100	5552.1	5509.4	5474.7	5400.7	5320.3	5261.6	5191.0	5090.4	0.77	4.36
BUSINESS SERVICES, 1985=100	128.5	127.6	125.7	124.1	122.7	122.0	120.3	118.6	0.75	4.73
HOTEL, 1985=100	118.6	115.7	115.7	116.1	115.0	111.7	110.0	108.8	2.51	3.10
RECREATION, 1985=100	138.3	139.7	136.3	135.0	133.4	131.9	129.4	127.0	-1.00	3.66
FINANCE, INSUR. AND REAL ESTATE EMPLOYMENT	141.1	142.0	138.1	135.8	133.1	135.8	130.7	124.4	-0.67	6.01
<b>GOVERNMENT EMPLOYMENT, THOUSANDS</b>										
FEDERAL GOVERNMENT	1274.5	1270.2	1269.7	1264.6	1256.2	1250.8	1242.2	1231.9	0.34	1.46
STATE AND LOCAL	620.4	616.7	636.4	655.0	629.0	624.6	624.2	622.1	0.59	-1.38
	2860.7	2833.1	2825.9	2777.9	2755.8	2724.0	2694.6	2664.2	0.97	3.81

Data are weighted aggregates of available 12th District state data and are expressed as monthly rates unless otherwise noted.  
District indicator data are constructed by FRBSF research staff from public and industry sources.

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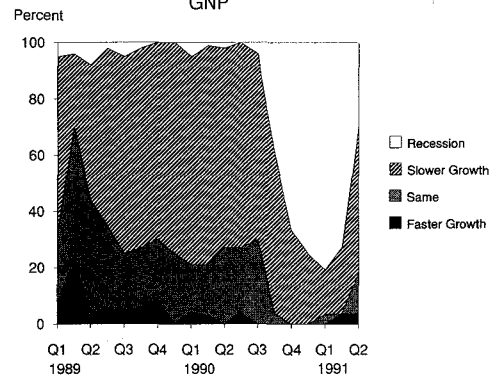
# Research Department Federal Reserve Bank of San Francisco

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PERSONAL INCOME  
ANNUALIZED PERCENT GROWTH RATES

	90Q4	90Q3	90Q2	90Q1	89Q4	ANNUAL GROWTH		
						1990	1989	1988
ALASKA	-0.1	6.3	9.9	6.5	-10.7	5.6	10.5	6.5
ARIZONA	3.2	3.3	10.2	7.1	6.5	5.9	7.4	5.9
CALIFORNIA	2.4	6.5	4.4	14.9	2.3	7.0	6.2	9.0
HAWAII	6.4	11.1	9.7	9.0	7.5	9.0	10.7	9.6
IDAHO	9.9	0.2	5.5	18.2	17.8	8.3	9.5	9.3
NEVADA	8.6	13.1	6.8	11.5	6.1	10.0	11.3	14.1
OREGON	5.5	5.8	8.1	8.3	13.3	6.9	9.6	9.4
UTAH	6.7	8.4	8.7	9.5	10.6	8.3	8.3	7.2
WASHINGTON	8.0	7.3	5.1	13.1	10.7	8.3	10.7	7.8
12TH DISTRICT	3.6	6.5	5.5	13.4	4.4	7.2	7.3	8.7
U.S.	3.3	5.3	5.6	9.7	6.6	5.9	6.7	7.4

Twelfth District Business Sentiment Index\*  
GNP



NON-AGRICULTURAL EMPLOYMENT  
ANNUALIZED PERCENT GROWTH RATES

	91Q1	90Q4	90Q3	90Q2	90Q1	ANNUAL GROWTH		
						1991*	1990	1989
ALASKA	7.8	-0.9	-2.7	7.9	10.0	7.8	3.6	5.4
ARIZONA	1.9	0.8	4.9	4.1	1.1	1.9	2.7	2.4
CALIFORNIA	0.5	-2.0	1.4	2.7	2.3	0.5	1.1	3.3
HAWAII	0.6	3.3	1.3	6.1	1.9	0.6	3.1	6.4
IDAHO	6.4	4.5	3.9	6.0	6.9	6.4	5.4	4.9
NEVADA	0.7	6.6	7.6	4.2	8.4	0.7	6.9	8.0
OREGON	3.4	0.7	1.4	3.1	3.7	3.4	2.3	4.0
UTAH	4.3	5.5	2.3	5.1	4.2	4.3	4.3	5.0
WASHINGTON	3.8	2.8	3.5	3.3	5.2	3.8	3.8	6.4
12TH DISTRICT	1.5	-0.3	2.1	3.2	3.0	1.5	2.0	3.9
U.S.	-2.4	-1.6	0.4	2.3	2.6	-2.4	0.9	2.3

\* Year-to-date

UNEMPLOYMENT RATES  
AVERAGE QUARTERLY DATA

	91Q1	90Q4	90Q3	90Q2	90Q1	ANNUAL AVG.		
						1991*	1990	1989
ALASKA	7.4	7.1	6.8	7.0	7.2	7.4	7.0	6.7
ARIZONA	5.3	5.5	5.3	5.5	5.1	5.3	5.3	5.2
CALIFORNIA	7.4	6.5	5.5	5.2	5.1	7.4	5.6	5.1
HAWAII	2.6	2.7	2.7	2.5	3.0	2.6	2.7	2.5
IDAHO	6.1	6.0	5.8	5.9	5.3	6.1	5.8	5.1
NEVADA	5.6	5.7	4.9	4.9	4.5	5.6	5.0	5.0
OREGON	6.1	5.9	5.6	5.2	5.3	6.1	5.5	5.7
UTAH	4.3	4.3	4.2	4.4	4.2	4.3	4.3	4.7
WASHINGTON	6.2	5.3	4.4	4.6	5.1	6.2	4.9	6.2
12TH DISTRICT	6.7	6.1	5.3	5.1	5.1	6.7	5.4	5.2
U.S.	6.5	5.9	5.6	5.3	5.3	6.5	5.5	5.3

\* Year-to-date